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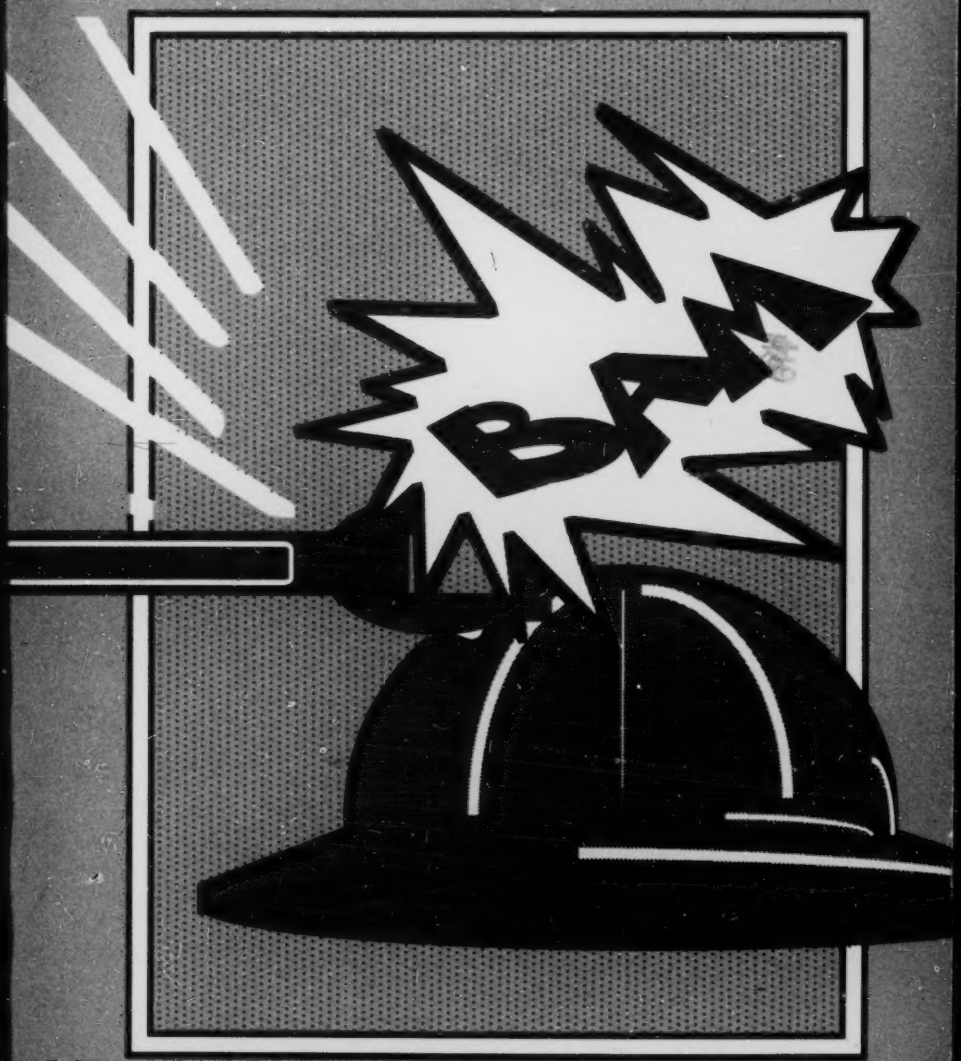
OCTOBER 1986
ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska



Work Related Injuries—
A Statistical Highlight of 1984

Alaska Economic Trends

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The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1985.

P/ Denotes preliminary estimates.
R/ Denotes revised estimates.

Work Related Injuries: A Statistical Highlight of 1984

By James Wilson

The Alaska Department of Labor collects and summarizes data on injuries and illnesses incurred by workers in Alaska's labor force. The data is based on reports filed to the Alaska Division of Workers' Compensation by employers and on an annual survey to collect information that employers maintain under the requirements of the Occupational Safety and Health Act (OSHA). An annual report for injuries in 1984 is now available. This article presents a brief summary of information contained in the annual report.

Definitions

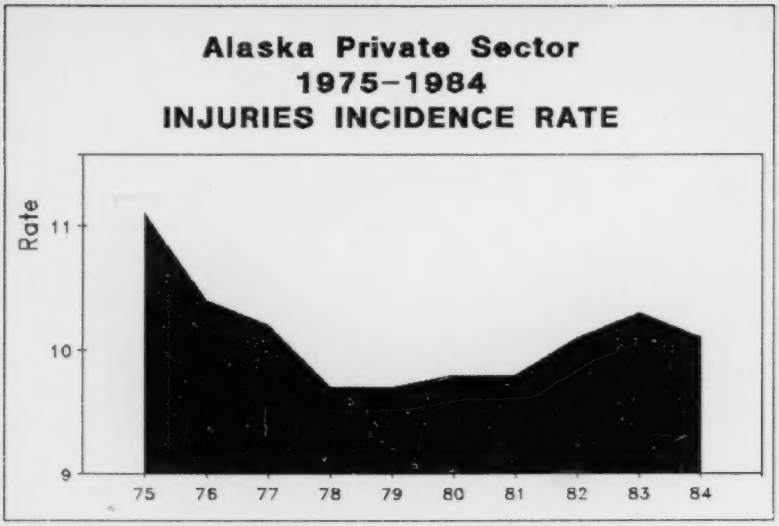
Unless otherwise stated the injury and illness rate referred to will mean the total number of OSHA recordable injury and illness cases per 100 full-time workers. Rates are developed for the type of case (injury, illness, injury and illness) and extent of case (lost workday cases, non-time-loss cases, total cases). Lost workday cases are those resulting in one or more days away from work or one or more days of restricted activity. Non-time-loss cases are those where no work time is lost by the employee beyond the day of injury.

1984 Injury/Illness Rate

The 1984 Alaska occupational injury and illness rate for the private sector was 10.3 cases per 100 workers. This is a decline from the 1983 rate of 10.6, which was the highest in recent years. The private sector rate of 10.3 is the sum of the injury case rate and the illness case rate. The 1984 injury case rate (10.1) declined from the seven year high (10.3) recorded in 1983 while the illness case rate (0.2) decreased to the level recorded in 1981-1982.

Incidence Rates: Injuries, Illnesses, Total Private Sector, Alaska 1975-1984

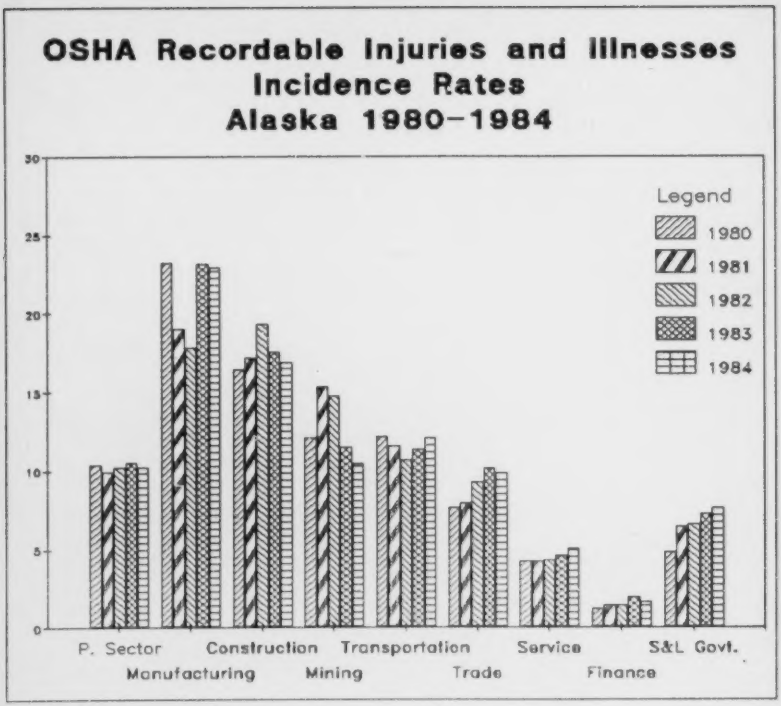
	75	76	77	78	79	80	81	82	83	84
Total	11.5	10.7	10.4	10.0	10.1	10.4	10.0	10.3	10.6	10.3
Injury	11.1	10.4	10.2	9.7	9.7	9.8	9.8	10.1	10.3	10.1
Illness	0.4	0.3	0.2	0.3	0.4	0.6	0.2	0.2	0.3	0.2



Time Loss Cases

The 1984 incidence rate for lost workday cases in the private sector (4.5) was the lowest recorded to date. The lost workday case rate declined in most major industry divisions. In construction the 1984 lost workday case rate equaled the record low set in 1980 while mining recorded a record low time loss case rate. The non-time-loss case rate rose slightly from 5.7 to 5.8 cases per 100 workers. An average of 16 workdays was lost for each time loss case in the private sector in 1984; this was unchanged from 1983. Estimated total lost workdays in the private sector equals a loss of one year of work for 400 employees. If measured in terms of salary the cost of the lost work time would be over $11 million. (This cost estimate is based on the average monthly salary figures for 1984 from the Statistical Quarterly, Fourth Quarter 1984.)

During 1984 the Alaska Division of Workers' Compensation processed 11,398 time loss claims; an increase of 5% over 1983. Private industry accounted for 86% of these claims. Only 5% of the cases were due to occupational illnesses. Injuries are most prevalent during the summer and early fall when Alaska's labor force is at its seasonal peak. In 1984, August was the peak month for on-the-job time loss injuries. Women filed only 19.1% of the time loss claims during 1984 although they comprised over 40% of the work force. The low proportion of claims from women is due to the fact that women tend to be found in less hazardous occupations.



Industry Highlights

In 1984 the oil and gas industry regained most of the employment it lost during 1983. The occupational injury and illness rate declined for the third year in a row, and in 1984 the rate of 10.6 rivaled the record low rate of 10.5 set in 1975. The time loss case rate for oil and gas (4.2 cases per 100 workers) was a record low in 1984.

Employment dropped in 1984 for the first time since 1979 as the four year boom in construction employment ended. The rate of occupational injuries and illnesses in construction was at its lowest level in four years. The lost workday case rate for construction fell from 8.1 to 7.0 to equal the record low set in 1980. The number of estimated lost workdays in construction decreased 1% from 1983; the first drop since 1980.

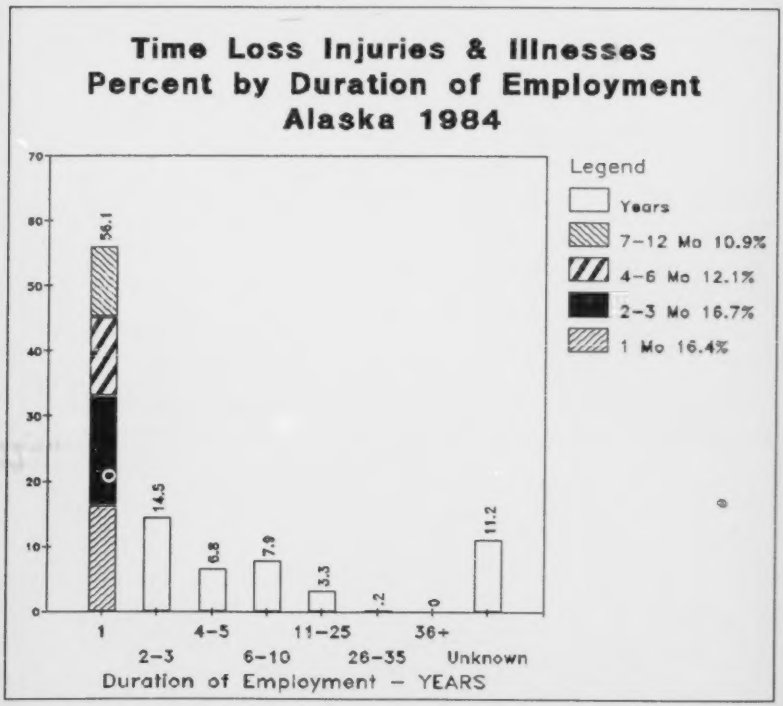
Firms in the manufacturing industries typically have the highest incidence rates for all categories. In 1984, the manufacturing rate for injuries and illnesses was 23.0 which is consistent with rates of prior

years. Manufacturing employment was at its lowest level in seven years. In Alaska manufacturing is composed mainly of seafood processing and lumber and wood products. Manufacturing accounts for 5% of Alaska's nonfederal employment and 12% of the reported time loss injury and illness cases.

Most Frequent Injuries

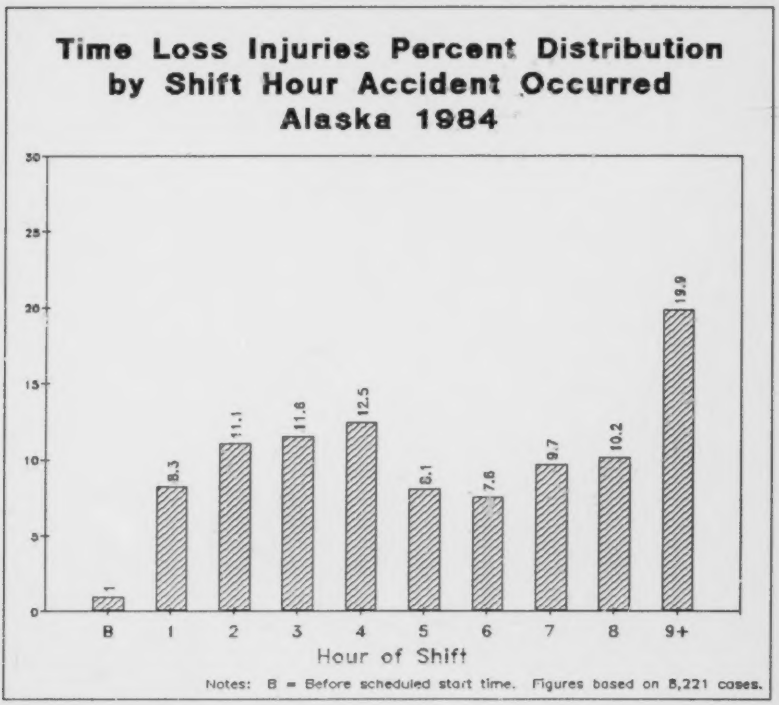
Data show that sprains and strains are the leading type of injury, accounting for 26.6% of the total. The back, involved in one-fourth of all time loss cases, is the most frequently injured part of the body. Sprains and strains are the most common back injuries with 95% of all back injuries due to sprains and strains. During 1984, as in prior years, overexertion was the leading cause of injury. In this year 86% of all overexertion cases were sprains and strains.

Time loss case data have consistently shown that the first few months on a job are the most hazardous for an employee. In 1984, 63% of all time loss injuries (excluding those of unknown job duration) involved employees during their first year on the job and 18% during the first month on the job.



Overtime - Injury Time?

Roughly one-fifth of all time loss injuries occur after the eighth work hour. In industries which characteristically have long working hours the percentage of accidents occurring after eight work hours is greater than the average. This information points out that fatigue plays a significant role in the occurrence of time loss accidents.

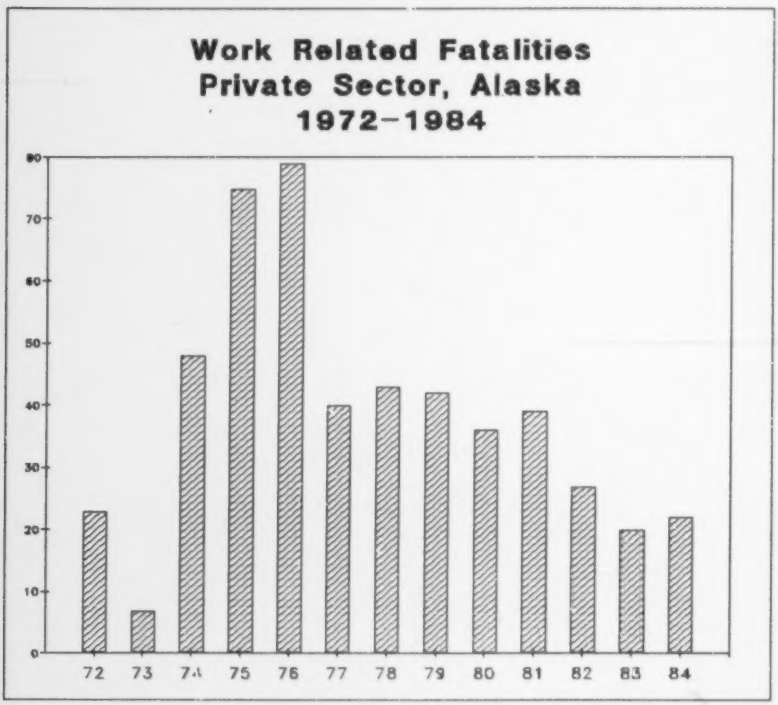


Fishing Industry

Up to 25,000 people fish commercially in Alaska. During state fiscal year 1985 the Alaska fishermen's fund received 2,999 claims for expenses resulting from work related injuries or illnesses incurred by commercial fishermen. This is a 14% increase over the prior year. One-third of the claims were filed by nonresident fishermen. Just over one-half of the claims were from fishermen in the Southcentral District.

Aircraft Related Deaths

During 1984 there were 23 work related deaths which were compensable under the Alaska Workers' Compensation Act. The leading cause of these deaths was aircraft accidents (6 cases or 26%). Aircraft accidents are frequently the leading cause of work related deaths in Alaska. In some prior years aircraft accidents were the cause of death in over one-half of the compensable cases. The number of compensable deaths recorded in 1983 and 1984 are the lowest since 1973.



The annual report, *Occupational Injury and Illness Information, Alaska 1984*, contains more detailed information on work related injuries and illnesses. This publication is available from the Alaska Department of Labor, Research and Analysis Section.

Alaska

By Edward Eboch

Employment in the Support Industries

Recent forecasts have been for a decline in population and employment as the effects of cut-backs in oil company and state expenditures work their way through the economy. As we head into the fall season, preliminary employment data show a loss of employment over the past year. To date, most of the loss in employment can be traced to a decline in construction and related activity over the last two years.

Public school enrollment, expected to be down from a year ago, has increased according to the Department of Education, suggesting that population declines have not yet accompanied the loss in employment. A survey of a number of the larger private schools around the state indicate private school enrolment at year ago levels, so there does not appear to be a shift from the private schools to the public schools.

The decline in employment in the support sectors of the economy may be less than many forecasters anticipate. Using a procedure called shift share analysis to analyze Alaska's economy, there is evidence to suggest that Alaska will suffer only small losses in employment in the support sectors outside of those areas heavily dependent on construction. Table 1 shows the percent of nonagricultural employment in the trade; finance, insurance, and real estate (F.I.R.E.); and service

Nonagricultural Employment
Percent by Industry
Average 1983-1985

	Trade	F.I.R.E.	Services
Alaska	19.7%	5.3%	19.1%
Montana	26.9%	4.8%	26.0%
North Dakota	26.7%	4.9%	22.7%
Wyoming	22.6%	3.9%	16.3%
United States	23.4%	6.1%	22.1%

Source: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, May 1986

Nonagricultural Wage and Salary Employment
By Place of Work
Alaska

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	243700	243300	249200	400	-5500
Mining	8600	8800	9700	-200	-1100
Construction	18800	18000	24300	800	-5500
Manufacturing	21700	22000	19300	-300	2400
Food & Kindred Prod.	14800	15100	13300	-300	1500
Lumber & Paper Prod.	3400	3300	2300	100	1100
All Other Mfg.	3500	3600	3700	-100	-200
Trans. Comm. & Utilities	20700	20000	20700	700	0
Trucking & Whseing.	2400	2200	2400	200	0
Water Transportation	2000	1500	1900	500	100
Air Transportation	6800	6800	6700	0	100
Other Trans. Comm. & Utilities	9500	9500	9700	0	-200
Trade	47600	46800	48600	800	-1000
Wholesale	8400	8600	8900	-200	-500
Retail	39200	38200	39700	1000	-500
Gen. Mer. & Apparel	5700	5600	5700	100	0
Food Stores	6400	6300	6600	100	-200
Eating & Drinking Pl.	14900	14200	14500	700	400
Other Retail Trade	12200	12100	12900	100	-700
Finance-Ins. & R.E.	13300	13300	13300	0	0
Services & Misc.	48100	47900	47900	200	200
Government	64900	66500	65400	-1600	-500
Federal	18200	18300	17900	-100	300
State	19100	20500	19700	-1400	-600
Local	27600	27700	27800	-100	-200

Prepared in cooperation with the U.S. Bureau of Labor Statistics.
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1985.

p/ Denotes primary estimates.
r/ Denotes revised estimates.

Alaska Hours and Earnings for Selected Industries 1/ 2/

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	P/ 7/86	R/ 6/86	7/85	P/ 7/86	R/ 6/86	7/85	P/ 7/86	R/ 6/86	7/85
Mining	1093.52	1085.99	1214.27	50.3	50.7	51.3	21.74	21.42	23.67
Construction	927.42	926.25	1030.75	39.0	39.0	43.4	23.78	23.75	23.75
Manufacturing	451.35	465.41	414.80	45.0	38.4	40.0	10.03	12.12	10.37
Food & Kindred Prod.	374.90	271.26	320.93	46.0	33.0	38.9	8.15	8.22	8.25
Lumber & Paper Prod.	660.33	769.30	673.87	43.5	49.0	43.9	15.18	15.70	15.35
Trans., Comm. & Utilities	577.12	563.27	601.92	36.9	36.6	38.0	15.64	15.39	15.84
Trade	373.97	382.60	411.47	33.6	34.1	34.9	11.13	11.22	11.79
Wholesale	501.96	500.85	578.95	37.1	37.8	38.7	13.53	13.25	14.96
Retail	330.53	341.50	353.47	32.5	32.9	33.6	10.17	10.38	10.52
Finance-Ins. & R.E.	396.17	391.36	450.89	34.6	35.1	36.1	11.45	11.15	12.49

1/ Prepared in cooperation with the Bureau of Labor Statistics US Department of Labor

2/ excludes eating and drinking establishments

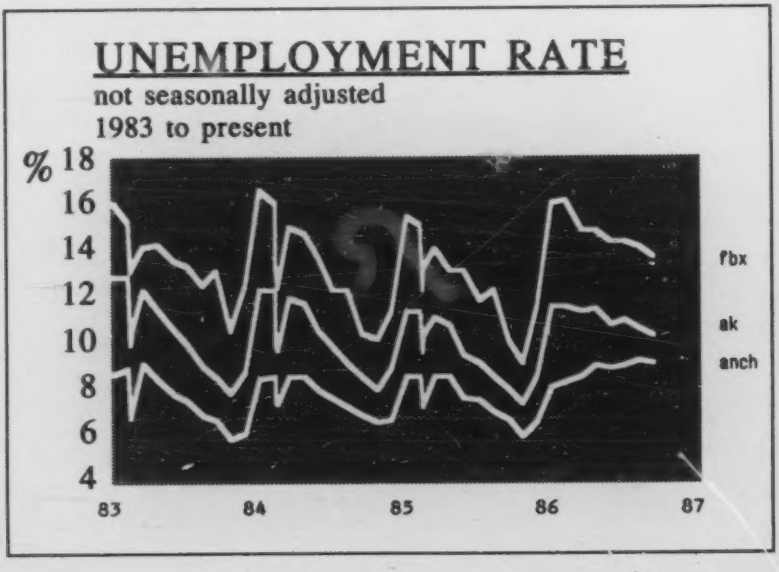
AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

enough to offset the declines in construction, mining, and some areas of trade over the year or to help with Alaska's unemployment problems. The large decline in state government over the month is a result of layoffs of firefighters who were hired last month on a temporary basis. State and local government employment is down from last year and is expected to continue to have year to year losses as adjustments to budget cuts are made.

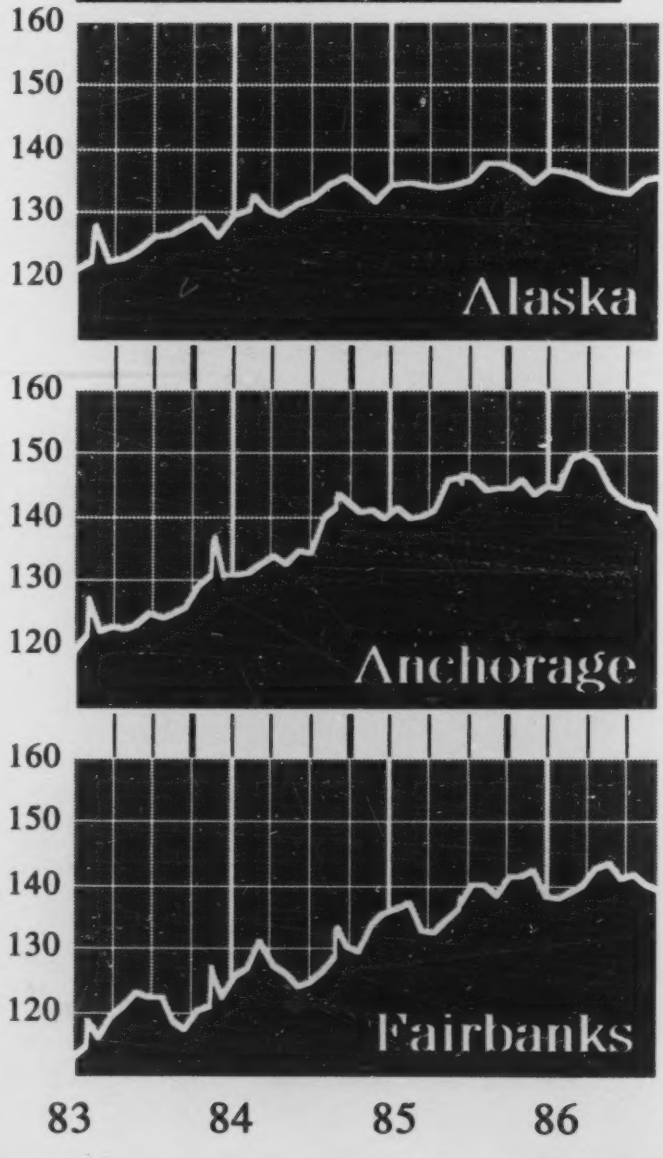
sectors. We find that these Alaska support sectors are a lesser percent of employment than most other states with similar characteristics (small, widely dispersed populations with resource based economies).

On the bright side is the increased federal government presence (both military and other), a rapidly growing tourism industry, and a strong fishing and timber industry. As the restructuring of the state's economy takes place, from oil dependent to a broader based economy, increased business opportunities will occur in the support sectors. A period of adjustment is occurring and additional employment losses are likely to occur through this year, but the losses may be much less than earlier forecast.

The unemployment rate for August was a record high, following July's record high. Employment was up for the month as fishing and timber had strong year-to-year growth and water transportation and eating places had smaller year-to-year increases. These increases were not



COMPOSITE NONAG. EMPLOYMENT INDEXES



seasonally adjusted 1983 to present
source: ak. dept. of labor

Anchorage/MatSu

By Greg Huff

Current Trends

The downturn in the Anchorage economy gained momentum in August. Anchorage employment was down 4.2%, or 5,100 jobs compared to last year. This drop represents the largest year to year decline since the down trend began early this year. Construction remains the big employment loser, but losses in employment in mining (oil and gas) and trade are increasing.

The decline in trade employment is no longer limited to construction related sectors. Grocery stores, clothing stores, general merchants and restaurants are all showing year to year losses in the August employment figures. Declines in employment in grocery stores were primarily among the major chains which are responding to a slower economy. This situation is unlike the past two years when Carrs and Safeway were expanding rapidly, more than offsetting employment losses among the smaller grocery chains. Our sample of restaurants show that not only are there cutbacks in employment because of slower business but that some firms are closing. The closure of Montgomery Ward's store accounts for the employment decline in the general merchandise sector.

Though jobs are being lost in Anchorage, population levels seem to be holding steady. The Anchorage School District in September reported that student enrollment was at last years levels and the Municipality of Anchorage Planning Department, in their preliminary population estimates, report the number of residents only slightly below year-ago levels. Both population statistics show that some net outmigration of Anchorage residents has occurred, but that the exodus is slow. This phenomenon of less than expected out-migration during a slack economy contributes to the unemployment rate breaking record highs. The unemployment rate for the Anchorage atSu labor market region was 9.7% in August. This is 2.6 percentage points greater than the 1985 rate and 1.5 points higher than in 1978 (a pipeline bust year).

The Decomposition of Anchorage Employment Data

One approach to the analysis of time series data (such as Anchorage employment data) involves an attempt to identify the factors that influence the periodic values in a series. This identification procedure, called decomposition, breaks a time series into three components; trend, cyclical fluctuations, and seasonal variations. Each component

Figure 1
Anchorage Employment
Annual Average and Trend
1959-1985

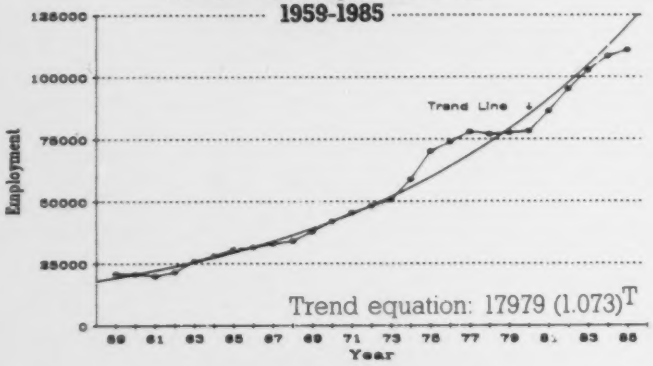
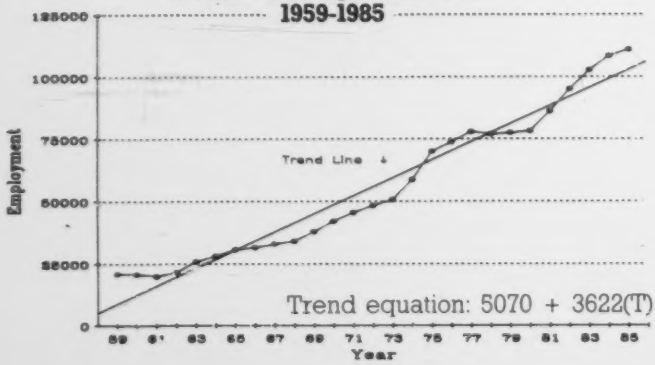


Figure 2
Anchorage Employment
Annual Average and Trend
1959-1985



has distinct characteristics and when plotted the differences become clear. This technique provides a conceptual approach to understand the past and look into the future.

Trend

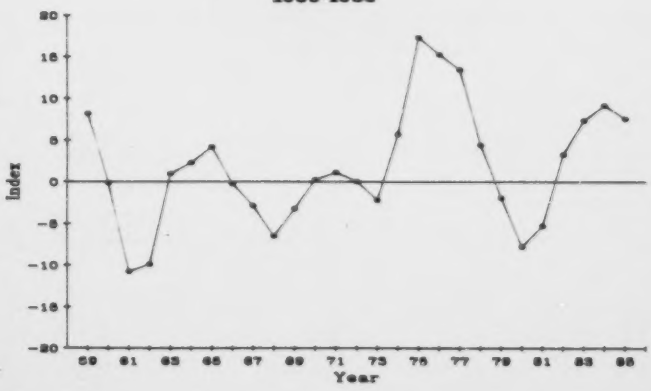
The "best fit" trend line of Anchorage employment data in figure 1 displays growth at a constant percentage rate (exponential growth) over the past 27 years. This long term growth can be attributed to many

factors, but most importantly are the federal government (including the military), the discovery and development of oil in the Cook Inlet and on the North Slope, and population and income increases.

Does this mean that in the long run Anchorage employment will continue to grow exponentially? An examination of the "best fit" trend line (Figure 1) of Anchorage employment shows that as the trend line moves towards the 1980s, it begins to increase much faster than the actual employment. Even the rapid employment gains of the early 1980s could not keep up with the constant percent growth rate of the exponential line.

Further analysis shows that Anchorage employment is shifting from a long-term trend that is exponential in nature to a growth curve which represents the tendency of many economies to grow at a declining percentage rate as they mature (that is, increasing but at a declining rate). The development of such a line chart for this article is not possible at this time. However, the straight line trend in figure 2 provides a conservative long term outlook. So despite the current down cycle in Anchorage's economy the long term outlook is for continued growth.

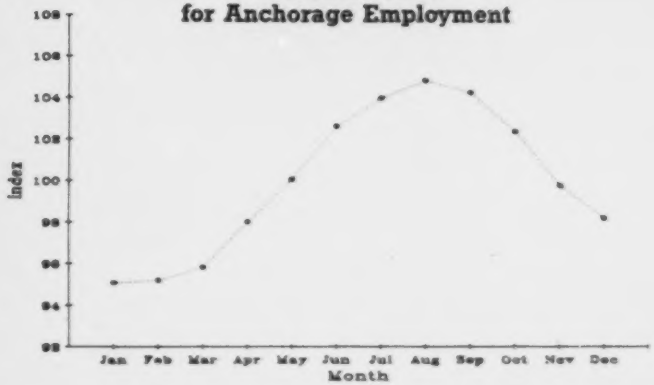
Figure 3
Anchorage Employment Cycles
1959-1985



Cyclical

The cyclical component is a series of irregular wave like fluctuations or cycles due to changing economic conditions of shorter duration than those affecting the trend line. Figure 3 displays the cyclical chart for Anchorage employment since statehood. The peaks were in 1959,

Figure 4
Seasonal Index
for Anchorage Employment



1965, 1971, 1975 and 1984. The lows were in 1961, 1968, 1973, 1980 and 1985. Each of these peaks and troughs were initiated by certain economic events causing employment to grow faster or slower than the long term trend.

The downturn in Anchorage's economy began slowly in 1985 and picked up momentum in 1986 as the chart indicates. The primary factor influencing the downturn was the collapse of oil prices. Indeed the movement of oil prices will continue to be the primary influence on the direction and magnitude of the cycle. How long this cyclical downturn will continue is the key to the short term employment outlook in Anchorage. There are no indications from any economic indicators that the cycle has hit bottom. One piece of good news, however, is that North Slope oil prices seem to have stabilized.

Seasonality

Seasonality refers to a pattern of change that recurs regularly from one season to the next. Figure 4 displays the average seasonal index for Anchorage employment (1975 to 1986). The graph represents monthly employment levels in terms of a percent of annual average employment. For example, the January index is 95 which means January employment in any year is usually 95% of the annual employment level, whereas August ,the peak month, is nearly 5% greater than the annual average. Generally, from the low employment month of January to the high month of August employment will fluctuate nearly 10 index points. This pattern makes seasonality easy to predict. However,

Labor Force By Region and Census Area

	Labor Force			Unemployment			Rate			Employment		
	P/ 8/86	R/ 7/86	8/85	P/ 8/86	R/ 7/86	8/85	P/ 8/86	R/ 7/86	8/85	P/ 8/86	R/ 7/86	8/85
Alaska Statewide	274040	278047	265876	27860	29351	21009	10.2	10.6	7.9	246180	248696	244867
Anch-MatSu Region	141876	143557	139689	13755	14280	9947	9.7	9.9	7.1	128121	129277	129742
Anchorage Borough	124704	125949	122776	11387	11610	8025	9.1	9.2	6.5	113317	114339	114751
MatSu Borough	17172	17608	16913	2368	2670	1922	13.8	15.2	11.4	14804	14938	14991
Gulf Coast Region	33198	34155	31134	3554	3803	2545	10.7	11.1	8.2	29644	30352	28589
Kenai Peninsula Bor	21267	21889	19708	2931	3115	2025	13.8	14.2	10.3	18336	18774	17683
Kodiak Island Bor	7475	7726	7185	325	405	290	4.3	5.2	4.0	7150	7321	6895
Valdez-Cordova	4456	4540	4241	298	283	230	6.7	6.2	5.4	4158	4257	4011
Interior Region	42193	42839	40494	5437	5683	3878	12.9	13.3	9.6	36756	37156	36616
Fairbanks North Star Br	34425	34961	32883	4722	4935	3294	13.7	14.1	10.0	29703	30026	29589
Southeast Fairbanks	3292	3315	3168	292	282	179	8.9	8.5	5.7	3000	3033	2989
Yukon-Koyukuk	4476	4563	4443	423	466	405	9.5	10.2	9.1	4053	4097	4038
Northern Region	8313	8338	8627	1157	1199	1069	13.9	14.4	12.4	7156	7139	7558
Kobuk	2699	2696	2686	460	462	321	17.0	17.1	12.0	2239	2234	2365
Nome	3502	3492	3539	515	512	384	14.7	14.7	10.9	2987	2980	3155
North Slope Borough	2112	2150	2402	182	225	364	8.6	10.5	15.2	1930	1925	2038
Southeast Region	35841	35821	33812	2886	3224	2541	8.1	9.0	7.5	32955	32597	31271
Haines Borough	1104	1089	1023	76	72	48	6.9	6.6	4.7	1028	1017	975
Juneau Borough	14350	14266	13325	1316	1373	956	9.2	9.6	7.2	13034	12893	12369
Ketchikan Gateway Bor	7505	7606	7093	488	666	435	6.5	8.8	6.1	7017	6940	6658
Pr of Wales-Outer Ketch	2658	2690	2542	264	322	270	9.9	12.0	10.6	2394	2368	2272
Sitka Borough	4412	4363	4388	332	327	517	7.5	7.5	11.8	4080	4036	3871
Skagway-Yakutat-Angoon	2114	2114	1960	197	218	141	9.3	10.3	7.2	1917	1896	1819
Wrangell-Petersburg	3698	3693	3481	213	246	174	5.8	6.7	5.0	3485	3447	3307
Southwest Region	12619	13337	12120	1071	1162	1029	8.5	8.7	8.5	11548	12175	11091
Aleutian Islands	2946	3105	2814	124	129	103	4.2	4.2	3.7	2822	2976	2711
Bethel	5025	5352	4890	546	630	588	10.9	11.8	12.0	4479	4722	4302
Bristol Bay Borough	468	496	454	19	23	23	4.1	4.6	5.1	449	473	431
Dillingham	2136	2242	2026	145	143	114	6.8	6.4	5.6	1991	2099	1912
Wade Hampton	2044	2142	1936	237	237	201	11.6	11.1	10.4	1807	1905	1735

P/ Preliminary R/ Revised 1985 Benchmark

Federal guidelines require the use of unrounded labor force data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	115050	115200	120150	-150	-5100
Mining	3700	3900	4300	-200	-600
Construction	8450	8000	11450	450	-3000
Manufacturing	3700	3800	3650	-100	50
Food & Kindred Prod.	1550	1650	1400	-100	150
Other Mfg.	2150	2150	2250	0	-100
Trans. Comm. & Utilities	10700	10600	10850	100	-150
Trucking & Whseing.	1350	1250	1400	100	-50
Water Transportation	350	400	400	-50	-50
Air Transportation	4350	4350	4250	0	100
Other Trans. Comm. & Utilities	4650	4600	4800	50	-150
Trade	27650	27400	28700	250	-1050
Wholesale	6350	6350	6700	0	-350
Retail	21300	21050	22000	250	-700
Gen. Merchandise	2000	1900	2150	100	-150
Food Stores	3050	3050	3100	0	-50
Eating & Drinking Pl.	8450	8250	8700	200	-250
Other Retail Trade	7800	7850	8050	-50	-250
Finance-Ins. & R.E.	8650	8700	8950	-50	-300
Services & Misc.	26950	27100	26850	-150	100
Government	25250	25700	25400	-450	-150
Federal	10100	10150	9850	-50	250
State	6600	6800	6850	-200	-250
Local	8550	8750	8700	-200	-150

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage-MatSu

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	122850	122900	128500	-50	-5650
Mining	3700	3900	4350	-200	-650
Construction	9250	8800	12500	450	-3250
Manufacturing	3800	3850	3800	-50	0
Trans. Comm. & Utilities	11400	11250	11600	150	-200
Trade	29650	29350	30750	300	-1100
Finance-Ins. & R.E.	9150	9200	9500	-50	-350
Services & Misc.	28400	28650	28550	-250	-150
Government	27500	27900	27450	-400	50

seasonality tends to be flatter during downturn years, such as 1986, because the peak summer season will be slower than average years.

Conclusion

The Anchorage economy is in one of its worst downturns in history. The decomposition provides a process to analyze the movement of employment systematically. The long-term trend for Anchorage employment is positive but cycles have been and always will be evident. The current downturn is expected to continue into 1987, but its magnitude remains to be determined. The leading indicator of the employment cycle continues to be the movement of oil prices.

Fairbanks/Interior

By Neal Fried

Employment numbers now available for Fairbanks, based on an actual count, paint a more serious economic picture than earlier estimates had been indicating. June was the first month our estimates revealed a decline in employment in Fairbanks, but actual employment records show Fairbanks' employment began to decline during January of this year. Although construction employment had year-to-year increases through the last quarter of 1985, it plummeted by 43% during the first quarter of 1986 (as compared to first quarter 1985). This decline in construction was dramatic enough to pull total employment below year-ago levels. What is interesting is that this happened before the dramatic decline in oil prices could have any affect, which means declines in employment may worsen.

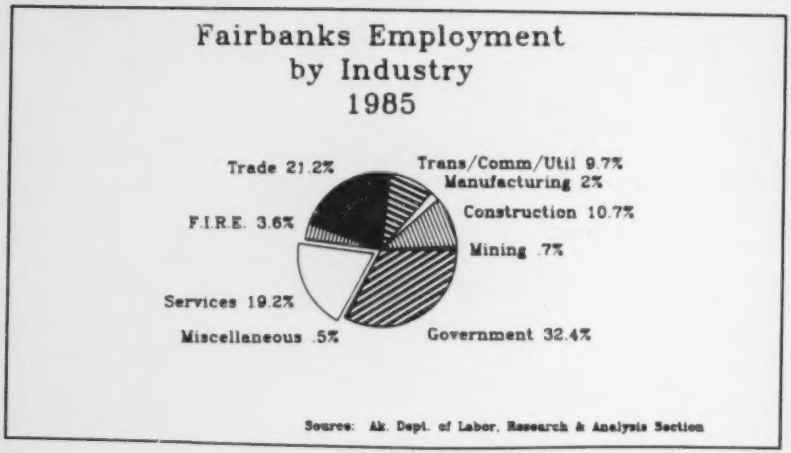
The August unemployment rate did not provide good news either. Fairbanks' unemployment rate for August was 13.7, less than one half of one percentage point below July but almost 4 percentage points above last year's August unemployment rate.

Fairbanks' Services

The service industry is probably the most broadly defined and all encompassing of all industries. Services includes hotels and other lodging places, firms providing personal, business, repair, and amusement services; health, social, legal, engineering and other professional services; private educational institutions; membership organizations (including religious organizations) and other miscellaneous services. The variety of occupations is even greater, from unskilled to the very skilled occupations. Doctors, lawyers, bellhops, barbers, social workers, maids, mechanics, teachers and computer programmers are just a few of the many occupations represented in the service industry.

The services industry employs 19% of Fairbanks' work force, making it the second largest private sector employer after trade. There were approximately 5,500 jobs in Fairbanks in the service industry with approximately $211 million in payroll in 1985. While the service industry is not the largest employer in Fairbanks, there are more firms in this industry than in any other industry. During the first quarter of 1986, there were 590 firms in the Fairbanks' service industry.

The service industry has grown rapidly in the recent past. Since 1980 this industry has added 1,500 new jobs. The service industry represents an increasing share of employment. In 1970 12% of Fair-



banks' work force was employed in this industry compared to 19% today. The national economic trend has been toward an increasingly service-based economy, and Fairbanks has been no exception to this trend.

Membership organizations is the number one growth sector within the service industry. Employment in membership organizations grew from 259 in 1980 to 702 in 1985. This category includes such groups as labor unions, business, religious and political organizations, fraternal, civic and social associations. This would include some native corporations and nonprofit organizations such as the Lions and the Chamber of Commerce.

Hotels and lodging employment was the number two growth sector within the service industry. Employment grew from 287 to 510 in 5 years. A larger population, more business activity and an increase in tourism have pushed their employment numbers up 80% from 1980 to 1985. Auto repair and business services followed in third and fourth place respectively. Nationally, business services is one of the fastest growing industries which could portend future strong growth in this industry in Fairbanks. Business services include advertising, computer services, business consultants, security services and employment agencies.

The largest sector in services is health services, which employs 1,267 people in Fairbanks. It includes both the hospital and all out-patient health care. (It does not include the health care facilities at Ft. Wainwright or Eielson AFB.) Though the largest sector, it has grown by only

6.8% over the past 5 years, much more slowly than the overall service industry (38%). Membership organizations ranks second in size, employing 702 people. Social services follows closely behind, employing 681. Day care services are also included in these figures.

Presently, the service industry is one of the few industries that is still growing in employment in Fairbanks. Its resilience comes from its diversity and the nature of some of its sectors. Social service organizations may actually grow during poor economic periods. Repair services often remain busy during economic downturns because people have their autos and appliances repaired instead of buying new ones. Health services are in large part essential and therefore are not adversely affected during recessions. Hotels and lodging could get hurt because of a decline in business activity but increases in tourism may offset a loss in business users. Engineering services have lost employment because of the decline in construction activity. How healthy the service industry will remain depends upon the extent of the current economic contraction. The longer it lasts, the more difficult it will be for the service industry to sustain growth.

Fairbanks' Service Industry Employment 1980 and 1985

	1980	1985	Percent Share 1985	Percent Growth 80-85
Total Services	4036	5536	100%	37%
Hotels	287	510	9%	78%
Personal Services	222	283	5%	28%
Business Services	617	940	17%	52%
Auto Repair	140	246	4%	76%
Misc. Repair	68	77	1%	13%
Amuse/Recreation	128	176	3%	38%
Health Services	1186	1267	23%	7%
Legal Services	136	141	3%	4%
Educational Services	48	60	1%	26%
Social Services	466	681	12%	46%
Membership Orgns.	259	702	13%	171%
Misc. Services	481	454	9%	-6%

Nonagricultural Wage and Salary Employment
By Place of Work
Fairbanks

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	30700	30650	31700	50	-1000
Mining	250	250	300	0	-50
Construction	3350	3250	4650	100	-1300
Manufacturing	650	650	650	0	0
Trans. Comm. & Utilities	3000	3000	3100	0	-100
Trucking & Whseing.	450	450	500	0	-50
Air Transportation	1000	950	1000	50	0
Other Trans. Comm. & Utilities	1550	1600	1600	-50	-50
Trade	6600	6600	6600	0	0
Wholesale	900	950	1050	-50	-150
Retail	5700	5650	5550	50	150
Gen. Mer. & Apparel	600	600	550	0	50
Food Stores	850	850	800	0	50
Other Retail Trade	4250	4200	4200	50	50
Finance-Ins. & R.E.	1100	1100	1100	0	0
Services & Misc.	6550	6350	6150	200	400
Government	9200	9450	9150	-250	50
Federal	3000	3000	2900	0	100
State	3600	3850	3750	-250	-150
Local	2600	2600	2500	0	100

Nonagricultural Wage and Salary Employment
By Place of Work
Interior

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	34900	35050	35900	-150	-1000
Mining	400	400	400	0	0
Construction	3550	3450	4900	100	-1350
Manufacturing	700	650	650	50	50
Trans. Comm. & Utilities	3350	3350	3500	0	-150
Trade	7100	7150	7100	-50	0
Finance-Ins. & R.E.	1150	1150	1150	0	0
Services & Misc.	7150	6900	6700	250	450
Government	11500	12000	11500	-500	0

Gulf Coast

By Neal Fried

Cordova Skirts the State's Past Oil Revenue

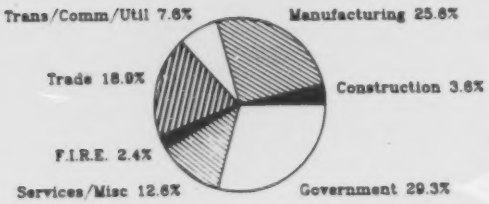
During the past five years most local economies in the state grew rapidly. Construction employment soared, the secondary sector flourished, and local and state government expanded. While much of the state's growth from 1980-1985 occurred as a result of the oil revenue boom, Cordova's economy still reacted largely to the whims of the fishing industry.

During 1985 26% of Cordova's wage and salary employment was in fish processing, making it the largest private employer in Cordova. However, fish harvesting employment is not included in the fish processing numbers. No accurate estimate for the number of fishermen exists for Cordova, but a figure of 800 exists for Prince William Sound. If both the fish processing employment and fish harvesting employment were combined, a conservative estimate would push their share of Cordova's employment to approximately 50%. The remainder of the area's employment provides support to this industry.

The decline of the shellfish fishery in the early 1980s made it difficult for sustained employment growth in spite of good salmon seasons. By 1985 (a record salmon harvest for the Cordova area), fish processing employment began to grow again. Employment grew 17% in 1985, which is phenomenal growth in one year. But given the fickle nature of the fishing industry, fish processing employment could decline as rapidly. Though the fishing employment numbers for 1986 are not yet available, the Prince William Sound salmon harvest was far smaller this year than in 1985. This could mean a decline in fish related employment in 1986.

The poor shellfish fishery increased the seasonality of this industry because it often took place during the non-salmon months, providing employment during the winter and spring. During 1985 fish processing employment fell as low as 13 in January and reached a high of 768 in August. The increased seasonality means fewer people can sustain themselves over the year in this industry. This could mean the industry may become increasingly dominated by a more migratory labor force. This in turn means fewer dollars earned in this industry remain in the local economy. In the resident hire study conducted by the Alaska Department of Labor, the fish processing industry statewide had the highest incidence of nonresident employment. This loss of income to Cordova also makes it more difficult for its economy to sustain economic growth.

Cordova Employment by Industry 1985



Source: Ak. Dept. of Labor, Research & Analysis Section

City of Cordova
Employment by Industry
1980-1985

	1980	1985	Percent Change 1980-1985
Total Employment	808	1024	27%
Construction	17	37	121%
Manufacturing*	175	262	50%
Trans. Comm.& Utilities	37	78	111%
Trade	140	194	38%
Finance-Ins. & R.E.	25	25	0%
Services & Misc.	133	129	-3%
Government	282	300	6%
Federal	35	30	-12%
State	81	96	18%
Local	167	174	4%

*Manufacturing and fish processing can be used interchangeably in this table.

Source: Alaska Department of Labor, Research & Analysis Section.

Nonagricultural Wage and Salary Employment
By Place of Work
Gulf Coast

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	25400	25800	25400	-400	0
Mining	900	900	900	0	0
Construction	2100	1900	2700	200	-600
Manufacturing	7050	7550	6500	-500	550
Food & Kindred Prod.	6350	6800	5800	-450	550
All Other Mfg.	700	750	700	-50	0
Trans. Comm. & Utilities	1750	1750	1900	0	-150
Trade	4150	4250	4200	-100	-50
Wholesale	600	600	600	0	0
Retail	3550	3650	3600	-100	-50
Finance-Ins. & R.E.	650	650	650	0	0
Services & Misc.	3650	3650	3550	0	100
Government	5150	5150	5000	0	150
Federal	550	550	550	0	0
State	1550	1600	1600	-50	-50
Local	3050	3000	2850	50	200

Oil Revenues in Cordova

Cordova did benefit from the state's oil largess. It helped Cordova weather the decline in the shellfish fishery which began in 1980-1981. Construction employment grew in Cordova as a result of the state's capital budget. New port facilities, roads, a hospital and other projects were constructed. Public construction in Cordova grew but little private construction followed. The impact of capital construction on Cordova's economy was probably significantly smaller than many of the state's larger communities because labor, materials, and contractors were imported for many of the projects. Residential construction appeared largely unaffected by the subsidized interest program and little commercial construction took place. The demand for this type of development did not materialize because the population grew very slowly. Cordova's population grew by 12% from 1980 to 1984 compared to 30% growth statewide.

Parts of Cordova's secondary sector grew. Retail trade grew by 38% over five years. Permanent fund dividends and tax relief may have increased resident disposable income, creating additional demand for retail goods. Services and the finance insurance and real estate

industry, two industries which boomed statewide, made no headway in Cordova.

Government, Cordova's largest wage and salary sector, inched ahead. Federal government employment fell slightly, local government employment grew by 4%, and state government employment grew by 18% over the past five years. State and local government statewide was a major growth sector during this period but in Cordova government employment scarcely increased. It may be that additional government services were not necessary to the extent they were elsewhere in the state because Cordova's population grew more slowly.

Cordova's immediate future lies with the health of the fishing industry. The sharp decline in oil revenues will mean far fewer publicly financed construction projects and it will apply downward pressure on state and local government employment. Without a rebound in the shellfish fishery, it will be difficult for Cordova to sustain growth in employment. There are some indications that the tanner crab fishery is slowly on the mend. The new processing of skinless, boneless salmon by Hormel may open up new markets for salmon and create additional employment in Cordova. In the long term, diversification of the economy and possible new fish markets may provide further impetus to Cordova's economy.

Current Trends

Summer activity has pulled the region's unemployment rates down. Kenai's remained high at 13.8% but it did fall from 14.2% in July. More significant is the fact that Kenai's August unemployment rate remains 3.5 points above year-ago figures. Kodiak's rate was the lowest in the region for the second month in a row, registering at 4.3%, one of the lowest in the state. Kodiak's reliance on the fishing industry keeps its unemployment figure low during the salmon fishing season, but its unemployment rate will often climb to double digit levels during the winter months. Valdez-Cordova's unemployment rate was the only one to climb in the region in August, possibly because of a poorer than expected salmon catch in Prince William Sound. The Valdez-Cordova unemployment rate was still lower than in most areas of the state at 6.7%.

Southeast Alaska

By John Boucher

Fishing Industry Rebounding Strongly

Southeast Alaska wage and salary employment gained 500 jobs during the month of August largely on the strength of the manufacturing industry. No other industry posted a significant gain in employment over the month. Local government and the transportation industry posted small employment gains but those were more than offset by decreases in state government and retail trade.

The food and kindred products and lumber and paper products sectors of the manufacturing industry have been creating the lions share of seasonal increases in employment this year, and have helped the region keep from posting significant year-to-year losses in employment. As the fishing season and logging camps wind down, Southeast Alaska will be hit with the double blow of seasonal industries losing large amounts of employment while traditionally stable industries of government, services and trade are losing employment also.

The Southeast Alaska fishery has been the key player injecting additional employment and money into the Southeast economy this summer. While many people in the industry were concerned because of the late salmon run, when the fish finally arrived they came in droves. Processors in both Petersburg and Ketchikan reported record salmon packs for the summer. This success has encouraged processors to invest in new plant equipment and to continue expanding their product line.

An experiment by one processor this summer entailed special handling of fish to insure quality of the product. This particular effort was designed to create a premium Alaska wild salmon that could favorably compete with Norwegian pen reared Atlantic salmon. Success in marketing this product could lead to an increased participation by fishermen in this type of project. The incentive for fishermen is in a higher price for the product. The key will be whether the product is perceived as an alternative to the Norwegian product.

Another experiment in product diversification is scheduled for a Ketchikan processor this fall. If successful, it could employ 50-75 people in the off season. The product is sea urchin roe, and although urchin roe has been tried in several Southeast Alaska processing plants before, it has not been done on this scale. Barriers include approval of the fishery on this scale, and an expected recovery rate of the

Nonagricultural Wage and Salary Employment
By Place of Work
Southeast Alaska

	p/ 8/86	r/ 7/86	8/85	Changes From: 7/86	8/85
Nonag. Wage & Salary	32050	31550	31600	500	450
Construction	1650	1700	2000	-50	-350
Manufacturing	5650	4750	4350	900	1300
Food & Kindred Prod.	2600	1800	2100	800	500
Lumber & Paper Prod.	2800	2700	2000	100	800
All Other Mfg.	250	250	250	0	0
Trans. Comm. & Utilities	2350	2300	2300	50	50
Trade	4650	4850	4850	-200	-200
Wholesale	400	400	400	0	0
Retail	4250	4450	4450	-200	-200
Finance-Ins. & R.E.	1150	1150	1150	0	0
Mining, Services & Misc.	4850	4850	4750	0	100
Government	11750	11950	12200	-200	-450
Federal	2200	2200	2150	0	50
State	5200	5450	5500	-250	-300
Local	4350	4300	4550	50	-200

product of at best 6%. Finding an off season labor force could pose a problem for the processor because students have returned to school and the transient labor force which follows Alaska's salmon fishery have largely departed the state.

At the Southeast Conference in Petersburg in September there was interest by the coastal communities, both of Southeast and Southwestern Alaska, in having state government develop an aquaculture policy which could foster growth of an aquaculture industry in the state. There was a great deal of support for the development of an industry which could supplement the current salmon industry, but fishermen in attendance who currently make their livelihood on the salmon fishery were opposed to the development of a Norwegian type pen rearing of salmon.

As of last spring, there were more than ten oyster farms in place in Southeast Alaska and there remains a tremendous potential for development of aquaculture in Southeast Alaska. Should a large scale shellfish or sea vegetable industry begin to grow in Southeast Alaska, year round stable employment could begin to supplement the seasonal employment of the salmon industry. One sea vegetable produced in Japan, nori, exceeds the current value of Alaska's salmon

industry. Although nori probably would not be viable in Alaska because of cold water, the potential for other sea vegetables is good.

Current Trends

Southeast Alaska unemployment rate fell in August to 8.1 percent, mostly as a result of the good fish harvest. Communities which are dependant upon the fishing industry, Ketchikan and Petersburg particularly, experienced drops in their unemployment rates over the month (see center insert). Prince of Wales-Outer Ketchikan also got relief from relatively high unemployment due to the fishing and wood products industries. The census areas which do not have either industries as an integral part of their local economies tended to have the greatest increase in unemployment in their areas when compared to last year.

Hours and Earnings

By John Boucher

Current Trends

Average weekly earnings in all but one industry improved from July to August as seasonal improvement in the Alaskan economy continued. The most notable change during August was in average hours worked in the food and kindred products sector of manufacturing. This change was due to the long hours that are worked during salmon season to process fish. Hours worked also improved in the lumber and paper products sector of manufacturing as logging activity increased in comparison to July.

All industries continue to show signs of the slower Alaskan economy when compared to last year. Every industry reported a decrease in average weekly earnings when compared to last August, and a majority reported a decrease in average weekly hours and average hourly earnings to year ago figures.

Alaska Hours and Earnings for Selected Industries 1/ 2/

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	P/ 8/86	R/ 7/86	8/85	P/ 8/86	R/ 7/86	8/85	P/ 8/86	R/ 7/86	8/85
Mining	1162.91	1102.36	1231.69	51.8	51.9	51.6	22.45	21.24	23.87
Construction	1051.45	986.87	1081.14	42.5	41.5	44.4	24.74	23.78	24.35
Manufacturing	484.50	450.21	547.34	47.5	43.0	50.4	10.20	10.47	10.86
Food & Kindred Prod	417.97	370.55	472.81	49.0	43.8	51.9	8.53	8.46	9.11
Lumber & Paper Prod	690.20	645.74	775.29	47.6	41.5	49.1	14.50	15.56	15.79
Trans., Comm. & Utilities	557.98	576.23	616.98	37.1	37.2	39.0	15.04	15.49	15.82
Trade	373.73	369.69	399.98	33.7	33.7	34.6	11.09	10.97	11.56
Wholesale	503.32	495.43	553.10	36.9	37.0	37.6	13.64	13.39	14.71
Retail	327.60	325.65	345.05	32.5	32.5	33.5	10.08	10.02	10.30
Finance-Ins. & R.E	398.25	396.27	398.43	35.4	34.7	34.2	11.25	11.42	11.65

1/ Prepared in cooperation with the Bureau of Labor Statistics US Department of Labor

2/ excludes eating and drinking establishments

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.